From: Soscia, Marylou

Sent: Friday, September 11, 2015 1:05 PM **To:** Kissinger, Lon < Kissinger.Lon@epa.gov>

Cc: Greg Frey <Greg_Frey@sra.com>; Dalton, Deborah <Dalton.Deborah@epa.gov>

Subject: RE: Adult Salmon Bioconcentration Project

Lon:

I am copying Greg Frey.

He is going to be managing this work and leading the schedule and work plan development.

Mary Lou

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From: Kissinger, Lon

Sent: Friday, September 11, 2015 9:53 AM

To: Soscia, Marylou; Macchio, Lisa; Shephard, Burt; Joe Oatman; Candon Tanaka; Chad Colter; Denise Kelsey; bard@critfc.org; scott.hauser.usrt@gmail.com; greenleaf@kootenai.org;

sfields@cdatribe-nsn.gov; Zach Penney; Chung, Angela

Cc: Buffo, Corey; Fleisig, Erica

Subject: Adult Salmon Bioconcentration Project

Importance: High

Hi,

We have made some progress on the adult salmon bioconcentration project

Corey Buffo, with EPA HQ Office of Water, has provided Region 10 with funding that should assist Dr. Gobas in conducting the bioconcentration modeling.

Joe Oatman has provided us with lower, average, and upper bound estimates of fall Chinook salmon migration to various dams.

CRITFC has provided with a report, prepared by Jeffery Fryer, John Whiteaker, and Denise Kelsey documenting migration of steelhead and chinook to various dams.

Denise Kelsey has also provided us with the salmon crosswalk, which identifies which salmon species are of concern in Idaho and the Columbia River Basin.

The question remains as to what chemicals we would model bioconcentration for. Generally, we're looking for chemicals that are not as lipophilic as PCBs but are not completely water soluble. Burt Shephard has suggested that chemicals with log Kows between 3 and 4 would be good candidates. In particular, Burt has suggested that endosulfan, one of the last chlorinated pesticides in use, is a good candidate chemical. It would be great if we had actual water or fish tissue concentrations for chemicals of interest. Evaluating the log Kows of criteria chemicals would likely inform this process.

Next steps:

- Determination of areas where tribal members are fishing (sources: Joe Oatman, Chad Colter). We then need to use existing migration data to determine lower bound/average/upper bound migration times to these areas. Likely this can be accomplished by using well determined migration times to nearby dams and some assumptions about salmon migration velocity.
- Determination of desired concentrations of desired chemicals in water or fish tissue: Lon has a phone call into Lyndal Johnson with NOAA regarding this.
- Review log Kows for criteria chemicals and consider modeling for those with log Kows between and 4: Lon or Burt will do this.
- Communication with Dr. Gobas about the funding we have available for the project: Burt Shephard will do this.

Thanks!

Lon Kissinger
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